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(71) Applicant *(for all designated States except US)*: **THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY** [CN/CN]; Clear Water Bay, Kowloon, Hong Kong (CN).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **KWOK, Hoi-Sing** [US/CN]; The Hong Kong University of Science and Technology, Tower 7, 9B, Clear Water Bay, Kowloon, Hong Kong (CN). **YU, Xing Jie** [CN/CN]; The Hong Kong University of Science and Technology, Tower A, 107D, Clear Water Bay, Kowloon, Hong Kong (CN).

(74) Agent: **NTD PATENT & TRADEMARK AGENCY LIMITED BEIJING OFFICE**; 10th Floor, Block A, Investment Plaza, 27 Jinrongdajie, Beijing 100032 (CN).

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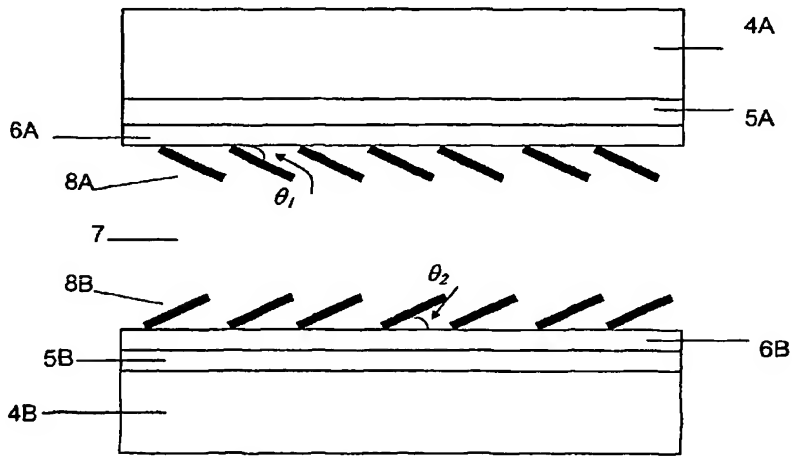
(54) Title: BISTABLE LIQUID CRYSTAL DEVICE



(57) Abstract: This invention provides a bistable liquid crystal device. The bistable liquid crystal device includes a first substrate having thereon a first conductive layer and a first alignment layer; a second substrate having thereon a second conductive layer and a second alignment layer; and a liquid crystal layer sandwiched between the first and second alignment layers. The first alignment layer induces a first pretilt angle θ1 in the range of 20°-65° between the liquid crystal layer in contact with the first alignment layer. The second alignment layer induces a second pretilt angle θ2 in the range of 20°-65° between the liquid crystal layer in contact with the second alignment layer. The liquid crystal layer is capable of maintaining a stable bend state or a stable splay state at zero bias voltage and is switchable between the stable bend state and the stable splay state when a switching energy is applied in operation to the liquid crystal layer.

WO 2005/040899 A1

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